Amendment to the Claims

Please cancel Claims 3, 6, and 8 without prejudice.
Please amend Claims 2, 5, and 7 as follows.

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1. (canceled)

2. (currently amended) A computer implemented method for combining two or more risk models for providing an investor with a risk model with wider scope than its
10   constituent parts, comprising the steps of said computer:
        denoting a class of algorithms for constructing estimates of covariance matrices
    from time histories of data;
        denoting a class of asset classes;
        denoting a class of multi-factor risk models for said denoted class of asset
15   classes; and
        constructing risk models for each asset class as follows:
            applying a method from said denoted class of algorithms to estimate a first
        covariance matrix from a history; and
            applying a different method from said denoted class of algorithms to
20   estimate a second covariance matrix from a history; and
            combining asset class risk models based on said class of multi-factor risk
        models and using said estimated first and second covariance matrices to form
        and output a risk model with broad coverage that is consistent with each asset
        class model.

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3. (canceled)

4. (previously presented) A computer implement method for combining two or more risk models for providing an investor with a risk model with wider scope than its constituent
30   parts, comprising the steps of said computer:
        letting C_1 denote a class of algorithms for constructing estimates of a covariance
    matrices from time histories of data;
        letting C_2 denote a class of asset classes;
        for x in C_2 let $C_3(x)$, denoting a class of multi-factor risk models for x;

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for y in $C_3(x)$ denoting its parts as follows:

factor exposures $X(y,t)$;

factor returns $f(y,t)$; and

specific covariance matrix $D(y,t)$;

5   giving the following components:

two or more asset classes $x_1,...,x_n$, let x denote an asset class which is a union of these given asset classes;

for each asset class x_i giving a risk model y_i in $C_3(x_i)$;

letting $Y(t)$ be such that the decomposition

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$$\begin{pmatrix} f(y_1 t) \\ f(y_2 t) \\ f(y_N t) \end{pmatrix} = \begin{pmatrix} y_1(t) \\ y_2(t) \\ y_N(t) \end{pmatrix} g(t) + \begin{pmatrix} \Sigma_1(t) \\ \Sigma_2(t) \\ \Sigma_N(t) \end{pmatrix}$$

$$f(t) \qquad\qquad y(t) \qquad\qquad \Sigma(t)$$

which results in residuals $\Sigma(t)$, such that correlations $(\Sigma_i(t), \Sigma_j(t)) = 0$ if $i \neq j$; and constructing a risk model for x as follows:

15   forming $X(t) = diag(X(y_1, t),...., X(y_n, t))$;

forming $D(t) = diag(D(y_1, t),...,D(y_n, t))$;

applying a method C_1 to estimate a covariance matrix $G(t)$ from a history of $g(t)$s; and

applying an optionally different method on C_1 to estimate a covariance

20   matrix $\phi(t)$ from a history of the $\Sigma(t)$s;

wherein $X(t)[Y(t)G(t)Y(t)^t + \phi(t)]X(t)^t + D(t)$ is a risk model for x.

5. (currently amended) A system for combining two or more risk models for providing an investor with a risk model with wider scope than its constituent parts, comprising:

25   computer means for denoting a class of algorithms for constructing estimates of a covariance matrices from time histories of data;

computer means for denoting a class of asset classes;

computer means for denoting a class of multi-factor risk models models for said denoted class of asset classes; and

computer means for constructing risk models for each asset class as follows:

5   applying a method from said denoted class of algorithms to estimate a first covariance matrix from a history; and

applying a different method from said denoted class of algorithms to estimate a second covariance matrix from a history; and

combining asset class risk models based on said class of multi-factor risk

10   models and using said estimated first and second covariance matrices to form and output a risk model with broad coverage that is consistent with each asset class model.

6. (canceled)

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7. (currently amended) A computer program product comprising a computer useable medium having control logic stored therein for causing a computer to combine two or more risk models for providing an investor with a risk model with wider scope than its constituent parts, comprising:

20   computer readable program code means for causing the computer to denote a class of algorithms for constructing estimates of a covariance matrices from time histories of data;

computer readable program code means for causing the computer to denote a class of asset classes;

25   computer readable program code means for causing the computer to denote a class of multi-factor risk models for said denoted class of asset classes; and

computer readable program code means for causing the computer to construct risk models for each asset class as follows:

applying a method from said denoted class of algorithms to estimate a first

30   covariance matrix from a history; and

applying a different method from said denoted class of algorithms to estimate a second covariance matrix from a history; and

combining asset class risk models based on said class of multi-factor risk models and using said estimated first and second covariance matrices to form

35   and output a risk model with broad coverage that is consistent with each asset class model.

8. (canceled)